

Worksheet 2: Branching

Name: _____

1. Write the name of each operator:

Comparison Operators	Logical Operators
== _____	&& _____
!= _____	_____
< _____	! _____
<= _____	
> _____	
>= _____	

2. Given these variables:

```
int score = 10;
int count = 7;
string name = "John";
```

Write the value of these Boolean expressions (write a program if you'd like to see if you are correct):

- a. `score >= 7` _____
- b. `count == score - 2` _____
- c. `name != "Sam"` _____
- d. `score - 3 != count` _____
- e. `score > 5 && count > 10` _____
- f. `count >= 5 && count <= 10` _____
- g. `score < 20 || count > 5` _____
- h. `score < 5 || score > 10` _____
- i. `!(count <= 10) && !(score != 10)` _____

3. Given the same variables above, write the code necessary to achieve the following:

<p>a. If count is equal to zero then change score to 100.</p>	
<p>b. If score is more than 5 increase count by two.</p>	

c. If score is more than count then decrease both by 2.	
d. If count is between 7 and 15 then decrease score by 5.	
e. If count is equal to 10 or name is equal to "Tom" then double the score. Otherwise, add 10 to the score.	

4. Using a random number generator, write the code to:

a. Create a random number generator.

b. Generate a random number between 1 and 10.
